MCC Bronchiolitis HFNC Pathway

Initiate @ 1L/kg/min
adjust FiO2 to goal SpO2 > 90%

Reassess hourly

Clinical Improvement?
(improved WOB, HR, RR, and hypoxia)

Weaning Pathway

Yes

Wait until patient has achieved 4hr period of stability on current flow rate* and FiO2 has been weaned to 21-30%
*mild tachypnea or mild dyspnea is not a contraindication to weaning

Is current support 1 L/kg/min?

Yes

Decrease flow to 1 L/kg/min

4 hour period of stability?

Yes

Turn HFNC off and transition to LFNC if still requiring FiO2

Monitor patient in setting that can restart HFNC for 8-12 hours after HFNC discontinued

Consider escalation to previous flow rate vs continuing on current flow rate

If increased WOB, consider escalation

No

Escalation Pathway

Yes

Escalate to 2 L/kg/min

Reassess hourly

Clinical Improvement?

Weaning Considerations
*After attempted wean, if patient has increase in WOB, RR, HR, or hypoxia, then re-escalate HFNC to last flow rate at which patient was "captured" and restart weaning pathway (i.e. wait for an additional 4 hours before attempting to wean)

*Please continue with intermittent suctioning, at least every 4 hours, ideally prior to feeding

Escalation Considerations
*May escalate HFNC more slowly to facilitate tolerance but with same goal of 2 L/kg/min

*Consider transition to NIPPV if patient shown to have hypercarbia

*Medical team needs to be involved in decision to escalate HFNC or initiate NIPPV

Inclusion Criteria
- Age < 2 years with diagnosis of bronchiolitis
- Hypoxia requiring >2L/min LFNC or 35% FiO2
  OR
- Persistent increased work of breathing

*Patients with significant hypercarbia or apneic episodes will likely require NIPPV or intubation

If you have any feedback on what worked or didn’t work, please elaborate on the back or email Alia Smith at alla.smith@childrens.harvard.edu